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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,338

11/14/2006

Masashi Miwa

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P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

CHAU, LISA N

ART UNIT

PAPER NUMBER

1785

NOTIFICATION DATE

DELIVERY MODE

02/02/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/594,338	<b>Applicant(s)</b> MIWA ET AL.	
	<b>Examiner</b> Lisa Chau	<b>Art Unit</b> 1785	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 52,54,55,58-102,104,106,108 and 110-136 is/are pending in the application.
- 4a) Of the above claim(s) 54,55,62-102,104,106,108 and 110-135 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52,58-61 and 136 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission, filed on 9/24/10.

### ***Response to Amendment***

2. Examiner acknowledges canceled Claims 1-51, 53, 56, 57, 103, 105, 107, and 109, withdrawn Claims 54, 55, 62-102, 104, 106, 108, and 110-135, amended Claims 52, 58, and 59, and new Claim 136 in the response filed on 9/24/10.

### ***Response to Arguments***

3. Applicant's arguments with respect to Claims 52, 58-61, and 136 have been considered but are moot in view of the new ground(s) of rejection.

Examiner notes that while Tokuhara do not disclose all the features of the present claimed invention (i.e. Tokuhara does not specifically teach its first protective layer having a rare-earth element), Tokuhara is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely Fe oxide first and second protective layers, and in combination with the primary reference, discloses the presently claimed invention.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 52, 58-61, and 136 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5876518 ("Hasegawa et al.") in view of JP 4328804 ("Tokuhara") provided in the IDS.

With regards to Claims 52, 59, 60, and 136, Hasegawa et al. teaches a rare-earth magnet comprising a Nd-Fe-B magnet body containing Nd rare-earth element and a protective layer that contains oxygen and an element derived from the magnet body (Col. 7: Lines 11-14, 50-54 and Col. 8: Lines 5-7). The protective layer comprises a first layer (rare earth element-rich layer) covering the magnet body and containing the neodymium rare-earth element and a second layer (corrosion-resistant film layer) covering the first layer (rare earth element-rich layer) and containing oxygen and no rare-earth element (Col. 2: Lines 65 bridging to Col. 3: Lines 6, Col. 6: Lines 18-25, Col. 7: Lines 50-54, and Col. 8: Lines 4-8).

Hasegawa et al. does not teach its first layer containing Fe and oxygen and its second layer containing Fe.

However, Tokuhara teaches a rare-earth magnet comprising a Fe-B-R magnet body wherein the surface of the body is covered by a Fe oxide and an outermost surface is covered by another Fe oxide layer (Abstract). It would have been obvious to

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one of ordinary skill in the art at the time of the invention was made to include Fe oxide in Hasegawa et al.'s first layer (rare earth element-rich layer) and Fe into the second layer (corrosion-resistant film) to obtain a corrosion-proof permanent magnet (Abstract).

Furthermore, both Hasegawa et al. and Tokuhara outer layers are functional equivalent to each other. That is, the layers are anti-corrosive in order to protect the Fe-B-R rare-earth magnet body (Please see Abstracts of Hasegawa et al. and Tokuhara). Therefore, one of ordinary skill in the art would envisage adding Fe and/or Fe oxide, as demonstrated in Tokuhara, in Hasegawa et al.'s first and second layers in view of functional equivalence of these materials and to obtain a desirable permanent magnet.

With regards to Claim 58, while Hasegawa et al. teaches the rare-earth element in the first layer (rare earth element-rich layer) are derived from the magnet body (Col. 8: Lines 4-11), it is silent on the teachings on the other elements in the protective layer being derived from the magnet body.

However, product-by-process claims are limited by and defined by the process and determination of patentability is based on the product itself. Regardless on how the elements in the protective layer are derived from, Hasegawa et al. in view of Tokuhara have the same materials present for each layer as claimed.

With regards to Claims 61, Hasegawa et al. meets the total thickness limitation of its first and second layers as claimed (Col. 8: Lines 1-3 and Claim 3).

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Chau whose telephone number is (571)270-5496. The examiner can normally be reached on Monday-Friday 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on (571) 272 - 1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LC/  
Lisa Chau

/Holly Rickman/  
Primary Examiner, Art Unit 1785